

Saurashtra University, Rajkot



Re- Accredited Grade B
By NAAC
(CGPA 2.93)

Faculty of Education

Department of Physical Education

**REGULATION, ORDINANCE AND
REVISED SYLLABUS FOR DEGREE OF
MASTER OF PHYSICAL EDUCATION
(M. P. Ed.)
SEMESTER SYSTEM**

*Choice Based Credit System
In force from June 2012
(w.e.f. Academic Year 2012-13)*

SAURASHTRA UNIVERSITY



Re-Accredited Grade B by NAAC
(CGPA 2.93)

Faculty of Education

Ordinances & Regulations for the Degree of **Master of Physical Education (M.P.Ed.)** (As per Choice Based Credit System)

Effective from June – 2012

1. **Preamble** (as per notification No. F.51-1/2009-NCTE (N&S) Dated 31st august 2009)

- (1) The Master of Physical Education (M.P.Ed.) is a professional physical education teacher education course meant for preparing teacher for senior secondary level as well as lectures/ directors/sports officers in colleges, teacher educators in colleges of physical Education and University Departments of Physical Education.
- (2) Only University Departments or institutions offering B.P.Ed. Programme are eligible to offer this Course.

O. M.P.Ed. – 1 (Eligibility)

(As per the Gazette of India Extraordinary part III section-4 No. 188 New Delhi, Monday July 26,2010/SHARANA 4,1932.)

In Appendix-8 to the said regulation... in paragraph 3, in sub-paragraph (2), for clause (a) the following clause shall be substituted, namely :-

- (a) “ Bachelor of Physical Education (B.P.Ed.) or Bachelor of Physical Education (BPE) or Bachelor of Sciences (BSC) in Health and Physical Education and Degree in sports with at least fifty-five per cent marks.
- (b) The reservation in seats and relaxation in qualifying marks for SC or ST or OBC and other categories shall be as per the rules of the Central Government /State Government, which ever applicable.

Admission Procedure

Admission shall be made on merit on the basis of marks obtained in the entrance examination (written test, fitness test, interview and percentage in qualifying examination) or any other selection process as per the policy of the State Government/University.

O. M.P.Ed. – 2

M.P.Ed. Degree programme shall be of Two academic years duration consisting of four semesters, which will be required to complete within 4 years from the date of his/her first admission in the semester – I.

O. M.P.Ed. – 3

M.P.Ed. Two years (four semesters) Degree programme is a regular fulltime programme and therefore admitted candidate can not join any other course of study without prior permission of the University.

O. M.P.Ed. – 4

The medium of instruction & Examination shall be English, Gujarati or Hindi which will not be changed during the entire Degree programme.

O. M.P.Ed. – 5

The Choice Based Credit System (CBCS) Programme of the University is a comprehensive and continuous evaluation programme and there shall be at least two hundred working days in each academic year/one hundred working days in each Semester exclusive of period of examination and admission etc. The institution shall work for a minimum of thirty six hours in a week (five or six days) minimum attendance of 75% is mandatory for the students. Non – Compliance of these requirements may amount in to rejection of the concerned term (Semester).

O. M.P.Ed. – 6

The Head of Department/College shall have to take appropriate measure against Ragging & Gender problems arising in the University Department. In case of occurrence of any such incident the violator shall be dealt with very seriously and appropriate stringent action will be taken by the head of Department by observing principle of natural justice. The head of Department may appoint a Committee to inquire in to the matter which will also observe the principle of natural justice. The Committee will submit its report to the head of Department who will forward the, same with his comment thereupon to the University Registrar, for taking further necessary action in the matter.

O. M.P.Ed. – 7

A candidate, at an University Semester End Examination if fails to obtain minimum marks for passing in particular course he/she will be require to reappear in that course without keeping term for that semester. The candidate will have to reappear in the Semester End Examination by paying fresh examination fee along with an application form. Such a candidate when obtains minimum or more than minimum marks for passing in the course his/her marks of reappearance will be carried forward for award of class/CGPA .

O. M.P.Ed. – 8

Admission granted by the University Department to any student shall be provisional till the enrolment/registration/enlistment is made by the University & in case admission is granted on the bases of provisional eligibility certificate, the conditions & instruction given by the University should be complied within the time limit fixed by the University or latest by the beginning of next semester, otherwise term kept by the such a student will be forfeited and no fees on any account will be refunded.

O. M.P.Ed. – 9

The Dissertation/Project shall be on one of the topics approved by the committee of post-graduate teachers teaching in the department/centre. The student will submit the same for approval to the Head of post-graduate Deptt./Centre/College not later than the beginning of second semester. Such approval should normally be communicated to the student well in advance by the P. G. Department. A supervisor shall also be appointed by the HOD & then the student will have to complete the dissertation under the guidance of the Supervisor.

O. M.P.Ed. – 10

Each of the admitting authority shall have to prepare and publish the merit list in the three fold as mentioned below:-

- (1) Candidate who have passed the qualifying examination from the Saurashtra University indicating category against each of the name in the last column such as General/S.T./S.C./S.E.B.C./P.H./Widow/Divorcee etc.
- (2) Candidate who have passed the qualifying examination from the other University situated in the State of Gujarat indicating General/S.T./S.C./S.E.B.C./P.H./Widow /Divorcee etc.
- (3) Candidate who has passed the qualifying examination from University situated out of the Gujarat State.

Candidate who have passed National or State level entrance test conducted by the competent authority should be given priority in admission.

O. M.P.Ed. – 11

Where it is specifically provided in the syllabus of the course, the concerned University Department/College may arrange educational tour/study tour. It will be compulsory on the part of the student to join the same and on completion of tour he will be required to submit a report to the University Department/College. Time spent for the purpose will be considered for computation of term-keeping requirement. The Department/College may arrange the tour by considering the nature/scope & other provisions of the syllabus.

R. M.P.Ed. – 1

The following are the courses prescribed for the study and examination scheme for M.P.Ed. programme.

Semester – I (M.P.Ed.)

Part – I

Paper	Paper Code	Title of the paper Subjects	Weekly Lectures	Credits
1	PEC 1001	Philosophical foundation of Physical education	4	4
2	PEC 1002	Health Education	4	4
3	PEC 1003	Research Method in Physical education	4	4
Elective Subjects (Any one)			4	4
4	PEE 1004	Sports Sociology	-	-
5	PEE 1005	Yoga and Naturopathy	-	-

Part – II Practical Instructional

Practical	Code	Activities	Weekly Lectures	Credits
6	PEP 1006	Athletics – Running (Any two)	4	4
7	PEP 1007	Games – Table Tennis, Badminton, Kabaddi, Kho-Kho.(Any two)	4	4
8	PEP 1008	Motor Fitness Test : 50 yard Dash Run, Standing Broad Jump, Pull ups, 25 mts. Shuttle run, Sit Ups	2	2
Total Credits/ Lectures			26	26

Part : III Add on credit**Maximum 6 credit**

Sr. No.	Add on Activities	Credit
1	Inter Uni. Participation (Any one game)	2
2	Inter college participation (min. two game)	2
3	Research paper presentation (National level)	2
4	Research paper presentation Min. two papers (state level)	2
5	Mountaineering – Advance camp Basic camp	2 1
6	Officiating – State/National level in any two game	2

**Weekly Lectures and credits
Semester – II**

Part – I

Paper	Paper Code	Title of the paper Subjects	Weekly Lectures	Credits
9	PEC 2001	Kinesiology & Bio-mechanics	4	4
10	PEC 2002	Test Measurement & Evaluation	4	4
11	PEC 2003	Statistics in Physical Education	4	4
Elective Subjects (Any one)			4	4
12	PEE 2004	Information technology in physical education	-	-
13	PEE 2005	Sports Nutrition	-	-

Part – II Practical Instructional

Practical	Code	Activities	Weekly Lectures	Credits
14	PEP 2006	Athletics – Jumping (Any two)	4	4
15	PEP 2007	Games – Handball, Basketball, Tennis, cricket (Any two)	4	4
16	PEP 2008	Physical Fitness Test 6 Minute Walk Test Illinois Agility Test vertical jump Test Sit and reach test Hand Grip Strength Test.	2	2
Total Credits/ Lectures			26	26

Part: III Add on credit**Maximum 6 credit**

Sr. No.	Add on Activities	Credit
1	Inter Uni. Participation (Any one game)	2
2	Inter college participation (min. two game)	2
3	Research paper presentation (National level)	2
4	Research paper presentation Min. two paper (state level)	2
5	Mountaineering – Advance camp Basic camp	2 1
6	Officiating – State/National level in any two game	2

**Weekly Lectures and credits
Semester – III**

Part – I

Paper	Paper Code	Title of the paper Subjects	Weekly Lectures	Credits
17	PEC 3001	Sports Medicine	4	4
18	PEC 3002	Scientific Principles of Training & Coaching	4	4
19	PEC 3003	Exercise Physiology	4	4
Elective/ Multi discipline any subject (any one)			4	4
20	PEM 3004	Physical fitness and wellness	-	-
21	PEM 3005	Olympic movement	-	-

Part – II Practical Instructional

Practical	Code	Activities		
22	PEP3006	Athletics – Throwing (Any two)	4	4
23	PEP 3007	Games – Volleyball, Football, Softball, Judo (Any two)	4	4
24	PEP 3008	Athletic ability performance, 100 mts, 800 mts., long jump, high jump and shot put.	2	2
Total Credits/ Lectures			26	26

Part: III Add on credit**Maximum 6 credit**

Sr. No.	Add on Activities	Credit
1	Inter Uni. Participation (Any one game)	2
2	Inter college participation (min. two game)	2
3	Research paper presentation (National level)	2
4	Research paper presentation Min. two paper (state level)	2
5	Mountaineering – Advance camp Basic camp	2 1
6	Officiating – State/National level in any two game	2

**Weekly Lectures and credits
Semester – IV**

Part – I

Paper	Paper Code	Title of the paper Subjects	Weekly Lectures	Credits
25	PEC 4001	Sports Management	4	4
26	PEC 4002	Physical Education & Sports Psychology	4	4
27	PEC 4003	Health and Fitness Management	4	4
Elective/ Multidisciplinary (any one)			4	4
28	PEM 4004	Sports Tourism	-	-
29	PEM 4005	Dissertation	-	-
30	PEM 4006	Life saving skill & disaster management		

Part – II Practical Instructional

Practical	Code	Activities		
31	PEP 4007	Internal Coaching Lesson (3 special. Games and 3 Athletics) External Coaching Lesson- (1- special. Games and 1 Athletics)	8	8
32	PEP 4008	Specialization games (Choose any one) Skill, Technique, Tactics, officiating, performance and Viva	2	2
Total Credits/ Lectures			26	26

Part: III Add on credit

Maximum 6 credits

Sr. No.	Add on Activities	Credit
1	Inter Uni. Participation (Any one game)	2
2	Inter college participation (min. two game)	2
3	Research paper presentation (National level)	2
4	Research paper presentation Min. two paper (state level)	2
5	Mountaineering – Advance camp	2
	Basic camp	1
6	Officiating – State/National level in any two game	2

Total Marking System

Semester	Theoretical	Practical	Credits
Semester – I	400	250	26
Semester – II	400	250	26
Semester – III	400	250	26
Semester – IV	400	250	26
Total	1600	1000	104

Semester	Core courses	Elective courses	Elective/ Multidisciplinary	Instructional practical activity
Semester-I	3	2	-	3
Semester-II	3	2	-	3
Semester-III	3	-	2	3
Semester-IV	3	-	3	3
Total	12	4	5	12

R. M.P.Ed. – 2

Candidate desiring to appear in any of the semester examination shall have to forward his application for admission to University Registrar through the HOD/College along with the certificate of attendance and fees prescribed by the University.

R. M.P.Ed. – 3

Three copies of the dissertation shall be submitted by the student in compute composed form out of which one copy will be retained by the Department/Center/College and two copies will be submitted by the Department/Center/College to the Controller of Examination of the University. The number of pages ordinarily should not exceed 125. The size of the paper will be 8½ x 11 inches and should be of white bond.

R. M.P.Ed. – 4

The examination for Master of Physical Education shall consist of 16 Theory courses. Candidate will be required to appear in four courses of each of the semester. Besides the University examination, internal marks will be added to each course separately. A candidate must obtain for passing at least 40% marks in each theory course in the University examination and also in the internal marks in each course of each semester.

In First, Semester and Third Semester there shall be a final Examination in part-II (Practical/Instructional Activity) and in Fourth Semester a final examination of Coaching Specialization to be Conducted by the Internal and external examiners and each candidate must obtain for passing at least 40% marks in this Examination. M.P.Ed. examination part – II shall be considered to be equivalent to the theory course.

R. M.P.Ed. – 5

The dissertation mentioned in semester four subject code PEM 4005 Shall be evaluated by the panel appointed by the controller of University Examination i.e. one external and one internal examiner for 70% maximum marks. and 30% maximum marks will be meant for viva –voce examination to be conducted by the Department.

R. M.P.Ed. - 6 **PROCEDURE FOR AWARDDING THE GRADES**

A student will be declared to have passed the final examination leading to the award of Degree of Master of Physical Education (M.P.Ed.) in first class with distinction or first class or second class as the case may be, provided he/she passes the examination in all the concerned subjects in each of the semesters.

6.1 PROCEDURE FOR AWARDING THE GRADES

6.1.1 The computation for the Semester Grade Point Average (SGPA) and cumulative grade point average (CGPA) shall be as follows:

The raw marks scored by the student (CCA + SEE) shall be indicated as **M**.

The 'Grade Point' and the grade letter that shall be awarded to the student on the bases of the range in which **M** is found is given in the following Table:

Different Weightage Scales :

(For awarding grades to Combined, Internal and Semester End Exam Scores for Theory and Practical Examination)

Different Scales			Grade	Grade Point
Combined	Internal	Semester End Exam		
$90 < X \leq 100$	$27 < X \leq 30$	$63 < X \leq 70$	O	10
$80 < X \leq 90$	$24 < X \leq 27$	$56 < X \leq 63$	A	9
$70 < X \leq 80$	$21 < X \leq 24$	$49 < X \leq 56$	B	8
$60 < X \leq 70$	$18 < X \leq 21$	$42 < X \leq 49$	C	7
$50 < X \leq 60$	$15 < X \leq 18$	$35 < X \leq 42$	D	6
$40 < X \leq 50$	$12 < X \leq 15$	$28 < X \leq 35$	E	5
Less than 40	Less than 12	Less than 28	F	4

Different Weightage Scales for Practical Activities Examination :

(For awarding grades to Semester End Practical Performance External Exam Test Score)

Different Scales for Practical Performance External Test	Grade	Grade Point
$45 < X \leq 50$	O	10
$40 < X \leq 45$	A	9
$35 < X \leq 40$	B	8
$30 < X \leq 35$	C	7
$25 < X \leq 30$	D	6
$20 < X \leq 25$	E	5
Less than 20	F	4

Scale for Awarding Grades based on SGPA & CGPA :

	Semester End SGPA	Programme End CGPA	Grade	Description
1	$9.0 < \text{SGPA} \leq 10$	$9.0 < \text{CGPA} \leq 10$	O	Outstanding
2	$8.0 < \text{SGPA} \leq 9.0$	$8.0 < \text{CGPA} \leq 9.0$	A	Upper Distinction
3	$7.0 < \text{SGPA} \leq 8.0$	$7.0 < \text{CGPA} \leq 8.0$	B	Distinction
4	$6.0 < \text{SGPA} \leq 7.0$	$6.0 < \text{CGPA} \leq 7.0$	C	First Class
5	$5.0 < \text{SGPA} \leq 6.0$	$5.0 < \text{CGPA} \leq 6.0$	D	Second Class
6	$4.0 < \text{SGPA} \leq 5.0$	$4.0 < \text{CGPA} \leq 5.0$	E	Passed
7	SGPA Less than 4.0	CGPA Less than 4.0	F	Failed

The Candidate who fails to obtain less than 40% in Practical activity examination shall have to clear the same in ensuring attempt and the marks of his / her previous attempt in which he/she have obtain more than 40% of marks will be carry forwarded for calculating his/her CGPA/SGPA & class.

6.2 The **Semester Grade Point Average (SGPA)** shall be based on aggregate marks of CCA and SEE.

If G is the grade point awarded to the candidate as described in the above table in a particular course and if Cr is the Credit Value for the course (for instance Cr=4) then the **grade credit point (Gr Cr Pt)** in that paper is given by

Grade Credit Points (Gr Cr Pt) = Credit of the course (Cr) x Grade secured in that course (G)

Sum of all Grade Credit Points secured each course
of the relevant semester by the student

SGPA = -----
Sum of Credits assigned to all Courses in this Semester

Sum of all Grade Credit Points of the entire Programme
CGPA = -----
Sum of Credits all semesters of the Programme

The CGPA shall be expressed to an accuracy of three decimal digits.

The percentage equivalence shall be obtained by multiplying CGPA with 10.

R. M.P.Ed.-7

There will be theory and practical examination (where it is prescribed in the syllabus) at the end of each semester. The viva voce examination will be conducted at the end of each semester.

R. M.P.Ed. -8

In addition to the above Ordinances and Regulations, the provisions made by the regulating authority shall become part of these Ordinances & Regulations.

R. M.P.Ed.-9

The following Degree programme are within the purview of the Faculty of Education B.Ed., M.Ed., B.P.Ed., M.P.Ed., B.P.E., the nature & scope of the programme is designed to focus on sole & isolated special aspect of study area of the programme. Its Ordinance & Regulations, Teaching and Examination schemes are also provided in the respective syllabus.

R. M. P.Ed.-10

Thirty percent internal evaluation shall be within the exclusive purview of the concerned Head of Department which requires purity, transparency accuracy in the evaluation & assessment of students. The benefits of re-assessment scheme will not be made available to the students in this regards.

Weekly Lectures and credits

Semester – I (M. P. Ed.)

Section – I

Sr. No.	Course Code	Title of the Course	Weekly Lectures	Credits
1	PEC 1001	Philosophical foundation of Physical education	4	4
2	PEC 1002	Health Education	4	4
3	PEC 1003	Research Method in Physical education	4	4
Elective Subjects (Any one)			4	4
4	PEE 1004	Sports Sociology	-	-
5	PEE 1005	Yoga and Naturopathy	-	-

Section – II Practical Instructional

Practical	Course Code	Activities	Weekly Lectures	Credits
6	PEP 1006	Athletics Skill Test – Running (Any two out of Stances, Strides and Finish Skill in running event) (Technical Ability and officiating)	4	4
7	PEP 1007	Skill Test of the Games – Table Tennis, Badminton, Kabaddi, Kho-Kho.(Any two)	4	4
8	PEP 1008	Motor Fitness Test : 50 yard Dash Run, Standing Broad Jump, Pull ups, 25 mts. Shuttle run, Sit Ups	2	2
Total Credits/ Lectures			26	26

Section: III Add on credit courses

Maximum 6 credits

Sr. No.	Add on Activities	Credit
1	Inter Uni. Participation (Any one game)	2
2	Inter college participation (min. two game)	2
3	Research paper presentation (National level seminar)	2
4	Research paper presentation Min. two paper (state level seminar)	2
5	Mountaineering – Advance camp	2
	Basic camp	1
6	Officiating – State/National level in any two game	2

Weekly Lectures and credits Semester – II

Section – I

Sr. No.	Course Code	Title of the Course	Weekly Lectures	Credits
9	PEC 2001	Kinesiology & Bio-mechanics	4	4
10	PEC 2002	Test Measurement & Evaluation	4	4
11	PEC 2003	Statistics in Physical Education	4	4
Elective Subjects			4	4
12	PEE 2004	Information technology in physical education	-	-
13	PEE 2005	Sports Nutrition	-	-

Section – II Practical Instructional

Practical	Course Code	Activities	Weekly Lectures	Credits
14	PEP 2006	Athletics – Jumping Skill Test (Any two out of Approach run, Take off and Landing Skills and Style in Jumping Events) (Technical Ability and officiating)	4	4
15	PEP 2007	Games – Handball, Basketball, Tennis, Cricket (Any two)	4	4
16	PEP 2008	Physical Fitness Test 6 Minute Walk Test Illinois Agility Test vertical jump Test Sit and reach test Hand Grip Strength Test	2	2
Total Credits/ Lectures			26	26

Section: III Add on credit courses

Maximum 6 credits

Sr. No.	Add on Activities	Credit
1	Inter Uni. Participation (Any one game)	2
2	Inter college participation (min. two game)	2
3	Research paper presentation (National level seminar)	2

4	Research paper presentation Min. two paper (state level seminar)	2
5	Mountaineering – Advance camp Basic camp	2 1
6	Officiating – State/National level in any two game	2

Weekly Lectures and credits Semester – III

Section – I

Paper	Course Code	Title of the Course	Weekly Lectures	Credits
17	PEC 3001	Sports Medicine	4	4
18	PEC 3002	Scientific Principles of Training & Coaching	4	4
19	PEC 3003	Exercise Physiology	4	4
Elective/ Multi discipline any subject (any one)			4	4
20	PEM 3004	Physical fitness and wellness	-	-
21	PEM 3005	Olympic movement	-	-

Section – II Practical Instructional

Practical	Course Code	Activities		
22	PEP3006	Athletics – Throwing Skill Test(Any two out of Stances, Throwing action and follow through skills in throwing event) (Technical Ability and officiating)	4	4
23	PEP 3007	Games – Volleyball, Football, Softball, Basket ball (Any two)	4	4
24	PEP 3008	Athletic performance Test, 100 mts Run 400 mts. Run Long Jump High Jump Shot Put	2	2
Total Credits / Lectures			26	26

Section: III Add on credit courses**Maximum 6 credits**

Sr. No.	Add on Activities	Credit
1	Inter Uni. Participation (Any one game)	2
2	Inter college participation (min. two game)	2
3	Research paper presentation (National level seminar)	2
4	Research paper presentation Min. two paper (state level seminar)	2
5	Mountaineering – Advance camp	2
	Basic camp	1
6	Officiating – State/National level in any two game	2

Weekly Lectures and credits Semester – IV

Section – I

Sr. No.	Course Code	Title of the Course	Weekly Lectures	Credits
25	PEC 4001	Sports Management	4	4
26	PEC 4002	Physical Education & Sports Psychology	4	4
27	PEC 4003	Health and Fitness Management	4	4
Elective/ Multidisciplinary (any one)			4	4
28	PEM 4004	Sports Tourism	-	-
29	PEM 4005	Dissertation	-	-
30	PEM 4006	Life saving skill & disaster management		

Section – II Practical Instructional

Practical	Course Code	Activities		
31	PEP 4007	Internal Coaching Lesson (3 special. Games and 3 Athletics) External Coaching Lesson- (1- special. Games and 1 Athletics)	8	8
32	PEP 4008	Specialization games (Choose any one) Skill, Technique, Tactics, officiating, performance and Viva	2	2
Total Credits/ Lectures			26	26

Section: III Add on credit courses

Maximum 6 credits

Sr. No.	Add on Activities	Credit
1	Inter Uni. Participation (Any one game)	2
2	Inter college participation (min. two game)	2
3	Research paper presentation (National level seminar)	2
4	Research paper presentation Min. two paper (state level seminar)	2
5	Mountaineering – Advance camp	2
	Basic camp	1
6	Officiating – State / National level in any two game	2

Semester - I

Evaluation Structure

Section – I Theory Section

Course Code	Title of the Course	Internal	External
PEC 1001	Philosophical Foundation of Physical Education	30	70
PEC 1002	Health Education	30	70
PEC 1003	Research in Physical Education	30	70
Elective		30	70
PEE 1004	Sports Sociology		
PEE 1005	Yoga and Naturopathy		
		120	280
	Theoretical Internal/ External Total marks	400	

Section – II Practical Section

		internal	External
PEP 1006	Athletics (Running Event) (Technical Ability and officiating)	30	70
PEP 1007	Games – Table- Tennis, Badminton, Kabaddi, Kho-Kho. (Any two games skill Achievement & officiating)	30	70
PEP1008	Motor Fitness Test : 50 yard Dash Run, Standing Broad Jump, Pull ups, 25 mts. Shuttle run, Sit Ups (Every Event 10 Marks)		50
		60	190
	Practical Internal / External Total marks	250	

Semester - I
PEC -1001 : Philosophical .Foundation of physical Education.

- Unit – I : Education.
- Meaning. Definition, aim and objectives of Education.
 - Philosophy and physical Education.
- Unit – II: Philosophical. Foundation of physical Education (Basic Principles)
Psychological, Biological, Sociological and Education.
Foundations.
- Unit – III Educational Philosophy, related to physical Education. Idealism, Naturalism, Realism, Pragmatism, Existentialism, Humanism.
- Unit - IV Physical Education in .Ancient Greece, Rome, Germany, Sweden, Denmark and Russia.
- Unit- V (A) Development and origin of physical Education in India
(B) Olympic movements- Ancient and modern Olympic history and development, Asian and Commonwealth games.

Ref. books

- Ajmersinh “physical Education and Olympic Movement” Kayani publishers’
Ludhiana 2004
- Buchev C.A. “Foundation of physical Education” Saint loais, Missouri, Mosbi
College sub. 1987
- Barrow Harsold M., “Man and Movement, principles of phy. Edu.” Leo and
Febiger, 1993
- Kamlesh M.L., “Physical Education: Feats and Foundation” P.S. publication
1985.
- Chauhan Shivkumar, “sharirik shiksha ka Darshik Avem Aitihashik Pehlu”
New Delhi, Friends publication.

Semester-I

PEC: 1002: Health Education.

- Unit – I Meaning, Definition. Aims, objectives principles of physical Education. Health Education. (Physical, Mental, Social) and Recreation.
- Unit-II: Methods of recreation, Recreational Programmer for various age groups.
- Unit - III (A) Environmental and professional. Hazards and First aid
(B) Communicable disease-their preventive and therapeutic methods (Aids, Air Water and Food)
- Unit - IV - School Health programmer and personal Health and hygiene
- Necessity and Maintain personal Health.
- Mental health
- Unit- V Population Education (policy)
- Reasons and actions of population Explosion.
- National Family Welfare.
- Sex Education and Necessity.

Ref. Books -

- Ajmersinh and others, “physical Education and Olympic movement.” Kalyani Publishers. Ludhiyana. 2004_
- Millev david K. “Fitness a life time Achievement” surjeet sub. Delhi, 1982
- Devendrasinh Dull. “Ahatony, physiology and health Education” friends sub. Delhi – 1998
- Charu Sapra, Yograjthani. “Health Education Encyclopedia” sports publication Delhi 2006
- Verma K.K. “Health Education” Friends Publication, Delhi
- Sarvaiya G.T. “Svasthya Shikshan Ane Ramat Chikitsashaslra” Gandhinagar, Gujarat Rasya pathya pustak mandal 2001

Semester-I
PEC – 1003: Research Methods in physical Education

- Unit - I Meaning, Definition, Nature, importance and Field of Research in Physical Education.
- Unit - II Meaning and Definition of problem, Criteria for selection of problem, source of problem Hypothesis-Formulation.- Review of Related literature, Library technique
- Unit - III (A) Sampling- Meaning, Definition, types, characteristic, Importance.
 (B) Research Tools, Questioners, interviews, Attitude Rating scale- characteristic and types.
- Unit - IV- (A) Historical Research- Meaning, Definition, importance- primary and secondary sources, External and internal criticism.
 (B) Descriptive, Survey type research, Meaning Definition, importance
- Unit V- (A) Case study
 (B) Experimental research-Meaning, Definition-Designs (Experimental)
 (C) Research proposal and Research Report

Ref. books :

- Patel Aatmaram J. “Sharirikl shikshan ma sanshodhan paddhatiyo” Bharat institute Ahmadabad
- Madan kamlesh, “Methodology of research in physical Education and sports” Chaniara N.J. kasundra P.M. “Sanshodhan Aheval” om printers, Ahmadabad.2007
- Thomar R. Nelson Jaek K. “Research methods in physical activity, U.S.A. Human kinetics, 1996
-

Semester - I

PEE – 1004: Sports sociology (Elective)

- Unit – I - Sociology.
- Meaning, Definition and importance of sociology.
- Meaning, Definition and importance of sports sociology.
- Unit – II Meaning and Definition of Heredity and Environment
Factors affecting sports competition, Environment, spectators, competitor, and Grounds
- Unit –III: Meaning, Definition and principles of games, competition.
In sports, Co-operation, group Dynamics,
(Team Co-ordination)
- Unit – IV - Games sports and socialization (Role of Home, school and Education)
- Role of Games in Socialization.
- Role of Leadership to establish good relationship in society
By games and sports.
- Unit –V - Social Nature and physical activity of Humans,
- Games and sports as a cultural heritage for Humans.
- Beliefs and traditions.
- Economy and politics Games and sports.

Ref Books

Anthony Lacker, “The sociology of sports and physical Education” Rutledge Taylor and Francis, 2002.

Adward and Lerim, “Sociology of sports. The dorsi press, Illinois,1973.

Sharma S.R., “Sociological Foundation in physical Education and sports New Delhi, Friends publications,

Pobu A., “Sociology of sports, Delhi, Friends publication

Semester-I

PEE – 1005: Yoga and Naturopathy (Elective)

- Unit - I Meaning, importance of yoga and pranayam, attentive Matters to note, difference between yoga and exercises.
- Unit- II Types of Asnas, Importance, Sun Salutation.
- Unit - III Ashtaga yoga
- Types of pranayam and importance.
 - Omkar, kapalbhati, Bhramri, shitli, shitkari.
- Unit – IV Naturopathy,
- Meaning, History and importance.
 - Principles for Naturopathy.
- Unit –V Medium (types) of Naturopathy.
- Food, water, mud, Massage, Magnet therapy, sun bath, Fast, Acupressure.

Ref books

- Sarin N. “Yog shiksha avem yog owara Rog Nivaran.” Delhi, Khel sahitya Kendra,1195
- Satypal. Dholandas Agrawal “Yoga Ashans Avem Sadhana” Delhi, Bhartiya Yoga sansthan. 1989.
- Karambelkar P.V., “patanjali Yoga sutra”. Lohavala, Kaivalyadham.
- Gaud Gangaprasad, “prakratik Ayuvigyan”, Morinagar. Utarpradesh 994.

Semester – II Evaluation Structure

Part – I Theory Section

Paper Code	Title of the Paper	Internal	External
PEC 2001	Kinesiology and Bio-mechanics	30	70
PEC 2002	Test, Measurement, Evaluation	30	70
PEC 2003	Statistics in Physical Education	30	70
Elective (choose any one)		30	70
PEE 2004	Information technology in Physical Education		
PEE 2005	Sports Nutrition		
		120	280
	Theoretical Internal/ External Total marks	400	

Part – II Practical Section

Event			
PEP 2006	Athletics – Jumping Events (Skill Achievement and officiating)	30	70
PEP 2007	Games – Handball, Basketball, Tennis, Cricket. (any two games skill achievement and officiating)	30	70
PEP 2008	<u>Physical Fitness Test</u> 6 Minute Walk Test Illinois Agility Test vertical jump Test Sit and reach test Hand Grip Strength Test (Every Event 10 Marks)		50
		60	190
	Practical Internal/ External Total marks	250	

Semester - II
PEC: 2001: Kinesiology and Biomechanics

- Unit – I Meaning, Definition and importance of kinesiology and Biomechanics.
- Unit- II Basic fundamentals of Anatomy, joint and their movements, Planes and axis.
- Unit – II - Kinetics
 - Kinematics
 - Linear and angular motion.
- Unit – III : Rules of motion, principles of Balance (Equilibrium) and Force, spin and Elasticity lever
- Unit – IV : Analysis of motor movements’ in muscle, mechanical Analysis of skills in various games, Running, Jumping, Throwing, Pulling, Pushing- mechanical Analysis – Athletics, Volleyball, Basketball, Handball, Cricket, Football, Hockey, Kabaddi, Kho-Kho.

Ref. books

- Patel Harshad I. “Sharirik Halanchalan Shashtra” Ahmedabad, Ahada Book depo.
- Patel Kirtibhai R. “Sharirk Halanchalan Shashtra”, Gandhinagar, Rama Prakashan, 2008.
- Viadhimir M.Z. “Kinetics of Human Motion”, Human Kinetics, 2002
- Uppal A.K. and V. Lawvance, “Kinesiology in Physical Education and Exercise science” Delhi, friends pub. 2004
- Patter M.C. Ginise “Biomechanics of sports and exercise” Delhi, Friends Pub. 2005
- Kumar Ramesh, “Khelgivyantirki Vigyan” Delhi, friends pub.

Semester - II

PEC: 2002: Test, Measurement and Evaluation in Physical Education

- Unit – I (A) Meaning, Definition and importance of Test, Measurement And Evaluation
(B) Classification of Tests, Criteria for selection of the Test, Body composition (B.M.I., Fat Measurement)
- Unit – II Physical fitness and Motor fitness tests
(1) AAHPER youth fitness test
(2) National Physical fitness drive
(3) Indiana Motor fitness test
(4) J.C.R. Test
- Unit- III (A) General Motor ability test
(1) Barrow-General Motor ability test
(2) Newton Motor ability test
(3) Cozen Athletic ability test
(4) Larson Test
(B) Cardiovascular and strength test
(1) Harward step test
(2) Cooper's 12 minute run/walk test
(3) Kross-waber strength test
(4) Roger's strength test
- Unit – IV Skill Related Test of games
Badminton – (1) Lockhart Mcfurson test
(2) Miller wall-valley test
Basketball - (1) Jhonson Basketball test
(2) Leelich Basketball test
Hockey - (1) Harbansingh Hockey test
Tennis - (1) Dyer Tennis test
(2) Hevit Tennis test
Volleyball - (1) Russel Lange test
(2) Braddy Volleyball test
- Unit – V - Concept of social and psychological test
- Self concept (social)
- Peterson's social ability measurement
- Anxiety test (SCAT)

Ref. Books

Kasundra P.M., Patel K.R., "Sharirik Shikshan Ma Kasotiyoy, Mapan ane Mulyankan", Gandhinagar, Rama Prakashan.

Kansal D.K. "Test and Measurement in sports and physical education' New Delhi, D.V.S. publication 1996

Ashare M.H. “Sharirik Shiksha Me Parixa Avem Mapan” Ahurwati, Ahare
Prakashan

Clark Harsion, Clark david, “Application of Measurement to physical
education.”, Newjersy Practice Hall Inc.

Saffrit Margent J. “Introducation to Measurement in physical education and
exercise science”

Johnson, Barry L, Nelson Jack K. “Pratical Measurement for evaluation in
physical education, Delhi, Surjeet Publication, 1986

Corbin Charles B. Ruth Lindsey, Concept of physical fitness with laboratories,
W.M.C. Brown publishers, IOWA – 1989

Hustod Dougls N, Lechi Alan, “Measurement and Evaluation in physical
education and exercise science” Ariconna, 1994.

Semester – II
PEC : 2003: Statistics in Physical Education

- Unit – I Definition, need and importance of statistics
- Unit – II Frequency distribution, Measures of central Tendency, Mean, Mode, Medium Quartiles, deciles, percentile, grouped and ungrouped data – computation and uses.
- Unit – III (A) Measures of variability, Range, Average deviation, Quartile deviation, Standard deviation.
 (B) Meaning, Definition, uses and types of Graphs – Line, Bar, Simple, Comparative, Histogram, Frequency PolyGram Olive Curve
- Unit – IV (A) Co-Relation – Person’s product, Moment co-relation
 (B) Normal curve – Meaning, Qualities, Kurtosis, Skew ness
- Unit- V Z-scale, T-scale, Sigma scale, ‘t’ ratio

Ref. books.

- Parekh Bhagvanlal U, Trivedi Manubhai D., “Shikshan Ma Ankadashshtra”, Ahemdabad, University Granth Nirman Board 1994.
- Verma Prakash J. “A text book of sports statistical” Gwalior, Venus publication, 2004.
- Clarke Harison H. “Research process in physical education, Health Education and Recreation, New jerry, Practice Hall inc. 1979.
- Thomes Jerry R., Nelson Jack K., “Research Methods in Physical acitivity”, Human Kinetics, U.S.A. 1996.
- Shiv Ram Krishna S. “Statistics for physical Education”, New Delhi, Friends Publication.
- Parekh Suresh C., “Aprachaliy Ahkadashashtra”, Junagadh, Gujarat, 1998.

Semester – II

PEE: 2004: Information Technology in Physical Education (Elective)

- Unit – I Computer – Meaning and definition – components of computer – input and output devices – storage devices – software and hardware – languages LAN and WAN – Application of computer in physical education and sports.
- Unit – II MS Word – document creating, saving and opening – formatting and Editing features – Drawing tables – page setup – paragraph alignment spelling and grammar check – printing option – inserting page number, graph, footnote and end notes – mail merge – hyperlink.
- Unit – III Introduction to MS Excel – creating, saving and opening a spreadsheet – formatting and editing – creating formulas – Adjusting Column width and Row height – Understanding charts –
- Unit- IV Introduction to MS Power Point – creating, saving and opening a PPT file – formatting and editing features – slide show – design – inserting slide number, picture, graph and table, hyperlink.
- Unit –V Meaning and Definition of Internet and multimedia their application in Physical Education and sports.
- Internet: History, Address, Server, Web, Web browser, Search Engine, Firewall – Email
- Multimedia: Fundamental application, 3D graphics, Animation, Morphing, sound and music.
- Practical: Introduction to games software, application of project manager, Internet, browsing, E-mail, PPT Presentation, Multi Media slide show.

Ref. books

- Jerry R. Thomas, Jack K. Nelson and Stephen J. Silverman, Research Methods in Physical activity (5th Ed.) New York, Human Kinetics, 2005.
- Chris Grattor and Lan Jones, Research methods for sports studies, London, Routledge taylor and Francis group 2004.
- Sunil Chauhan, Akash Saxena, Kratika Gupta, “Fundamentals of computer”, Firewall media 2006.

Semester – II
PEE: 2005: Sports Nutrition

- Unit – I Interpretation and Functions of Food. – Physiological, Psychological and social function of food.
- Unit – II Nutrition elements and function carbohydrate, fat, protein, Water, Vitamins and minerals.
- Unit- III Calorie demand and supply
- Maintain body weight
 - Nutrition value of Fruits
 - Junk food and its effect
 - Controversial Diet (versus food)
- Unit – IV (A) Digestion of food in the body
- Alimentary canal
 - Absorption of food
 - Use of Nutrient elements
- (B) Mal-Nutrition and Health
- Meaning, effect on Health, over Nutrition and overweight.
- Unit –V Sports Diet
- Pre training and pre competition food.
 - During training and During Competition food
 - Post training and post competition food
 - Necessity of Liquid.

Ref. books

- Neney Clark, Nutrition guide book, U.S.A. Leisure Press, Human Kinetics, 1990.
- Judy A> Driskel, Sports Nutrition, U.S.A., C.R.C, Press New York, 2000
- Pathak J.D. “Poshan Vidya” University Granth Nirman Board, 1974
- P.R. Reddy, Shardagupta, Ahar Juth Poshak Ghatako temna Kavyo, New Delhi, C.P.F.N., Continuous Education IGNOU Nov. 1988.
- Vaidya Ushakant, “Manav Poshan” Ahmedabad, University Granth Nirman Board, 1971

Semester - III
Evaluation Structure

Part – I Theory Section

Paper Code	Title of the Paper	Internal	External
PEC 3001	Sports Medicine	30	70
PEC 3002	Scientific Principle of Training & Coaching	30	70
PEC 3003	Exercise Physiology	30	70
Elective/ Multidisciplinary (any one)		30	70
PEM 3004	Physical fitness and wellness		
PEM 3005	Olympic Movement		
		120	280
	Theoretical Internal/ External Total marks	400	

Part – II Practical Section

Event			
PEP 3006	Athletics – Throwing Events (Skill proficiency and officiating)	30	70
PEP 3007	Games: Volleyball, Football, Softball, Judo (Any two Games skill proficiency and officiating)	30	70
PEP 3008	Athletic performance Test, 100 mts Run 400 mts. Run Long Jump High Jump Shot Put (Every Event 10 Marks)		50
		60	190
	Practical Internal/ External Total marks	250	

Semester – III
PEC : 3001: Sports Medicine

- Unit – I Meaning Definitions, aim, objectives, modern, concept and importance of sports medicine.
- Unit – II Injuries and First Aid in games and sports
- Skin – Abrasions, Lacerations, Incisions, Puncture wounds, Blister
 - Bone – Fractures, Dislocation
 - Soft Tissue – strain, sprains, cramp, Tennis elbow.
- Unit- III (A) Causes and prevention of injuries, Rehabilitation and first Aid.
- (B) Massage and Therapeutic Modalities – Hydrotherapy, Electrotherapy, Exercise therapy, cryo therapy and Thermo Therapy
- Unit – IV - Meaning and Definition of food and Diet food, Elements of Food and importance of Diet for players.
- Meaning, Definition and importance of Bioenergetics
- Unit –V Doping
- Meaning Types and effect on sports standard
 - Smoking and Alcohol
 - Banned drugs by world Anti doping agency and it's side effects.

Ref. books

- Clark Nancy, “Sports Nutrition guide book” Human Kinetics Liesure press, Champasigh, 1990.
- Driskell Judy A. “Sports Nutrition”, Washington D.C. 2000.
- Panday P.K., “Know how sports medicine”, Jalandhar book Market, 1989.
- Sinh Vijay, “Sharirik Shiksha Me Khel Chikitsa”, Friends publication New Delhi.

Semester – III
PEC: 3002: Scientific Principles of sports training

- Unit – I Sports training
Adaptation: Training and coaching, objectives of sports training, function, Traits and principles.
- Unit- II Training Load: Meaning, Definition, Types and principles, overload – cause, symptoms, relation between load and adaptation.
- Unit – III Training for Physical fitness components
- Strength, Endurance, speed, flexibility co-ordination – Intro, Definition, Form, Training methods for development.
- Unit – IV Technique – Tactics – Definition, Specialty, Training methods, cause and treatment for fault, Training principles for Technique and tactics.
- Unit –V Training plan – importance, principles, periodisation and their types.
- Control planning for sports training, trends,
- Sports talent identification process and methods.

Ref. books

- Sharma R.K. “Khel training Ke Vaigyanik Siddhant” New Delhi, Krida Sahitya Prakashan, 2000.
- Patel K.R., “Ramat talim na Vaiganik Siddhanto”, Gandhinagar, Rama Prakashan, 2001.
- Singh Hardayal, “Science of sports training”, New Delhi, D.A.V. Publication, 1991.
- Thelor O. Bompa, “Periodisation training sports”, U.S.A. Human Kinetics Pub.1999.
- Dick French W., “Sports training Principle” London, Letus book, 1980.

Semester – III
PEC : 3003: Exercise Physiology

- Unit – I Meaning, Definition, importance and scope of Exercise Physiology.
- Unit – II Muscles types' structure and Function, Fiber types, theory of Muscular contraction, energy for muscular contraction, acute and delayed muscular soreness.
- Unit – III effect of exercise on various systems, structure and functions of Body systems.
(Muscular system, cardio-respiratory system, Respiratory system, Digestion system, Nervous system)
- Unit – IV Oxygen debt, second wind, warm up, conditioning, fatigue, cooling down.
- Unit- V Factors affecting performance, fatigue, general and chronic symptoms and sites of fatigue, prevention, factors limiting anaerobic and aerobic performance

Ref. books

- Champe Pamella C. and Harry Richard A., "Bio-chemistry", New jersey, vaven pub.1994.
- Bowers Richard W., Fox Adward L. "Sports Physiology", brown pub. IOWA, 1992.
- Gaure Kristopher John, "Physiological test for elite athletes" Human Kinetics, Australia sports com. 2000.
- Patel Kautibhai R., "Sharir halan-chalan shashtra", Gandhinagar, Rama Prakashan, 2006.
- Sharma R.K. "Vyayam Kriya Vigyan Avem, Khel Chikitsa Shashtra", Krida Sahitra Prakashan, New Delhi, 1999.
- Patel Harshad I. "Kashratiy Sharir Vigyan", Ananda book, Ahmedabad, 1994.

Semester - III
PEM : 3004 Physical Fitness and Wellness
(Elective / Multidisciplinary)

- Unit - I - Meaning of Physical Fitness and definition
- Importance and Advantages of fitness (Physical - Mental)
- Unit - II Physical Fitness Components and it's evaluation
- Health related fitness
- Skill related fitness
- Exercise Programme for Children and youth
- Unit - III Activities for Fitness
- Aerobic dance, Water exercise, Brain exercise, Training for Co-ordination and balance, Isometric Training, Cycling, stair Up-down, Treadmill etc.
- Physical fitness and stress Management
- Concept of stress
- Contribution of exercises in stress Management
- Unit - IV Development of Physical Fitness and Steps for Maintain
- Factors affecting Physical Fitness
- Unit - V Meaning of Wellness, Definition
- Components of Wellness
- Contribution of Behaviour in Wellness
- Advantage of Wellness

Ref. Books

- Allen W. Jockson et al, "Physical activity for health and fitness, USA, Human Kinetics, 1999.
- Jerrold S. Greenberg, "Physical fitness and wellness (3rd Ed.) USA, Human Kinetics, 2004.
- Josheph P. Winnick and Francis X. Short, "Physical fitness training guide, USA, Human Kinetics, 1999.
- Lyne brick, "Fitness aerobics, USA, Human Kinetics, 1996.
- Martha White, "Water exercise". USA, Human Kinetics, 1996.
- Gudrun Paul, "Aerobic training, meyer and meyer sports : UK, 2000.

Semester – III

PEM: 3005: Olympic Movement (Elective/ Multi disciplinary)

- Unit – I History of Olympics – Ancient and modern Olympics – Sparta and Athens – Olympic games – summer and winter Olympics – Physical Education in India = structure of Olympic family – sports for all.
- Unit – II Olympic movement and its action – ‘Mission and Role of IOC – Olympic symbol – Olympic flag – Olympic Anthem – Olympic Flame and torches – Olympic movement in India.
- Unit – III International Olympic committee (IOC) – Legal status members – organization. (Session, Executive board and president) – IOC commissions and Ethics commissions International Federations (Ifs)
- Unit- IV Registration of Ifs – Mission and Role of Ifs within Olympic movement – National Olympic committee – Indian Olympic Association.
- Unit –V Olympic games, celebrations – Elections of the host city – Location, sites and venue – Olympic games co-ordination, commission – Olympic villages – protocol (use of Flag and Flame, opening and closing ceremony, Medal).

Ref. books

- www.olympic.org
- I.O.C. Marking Guide, Published by I.O.C.
- The Olympic charter, published by I.O.C.
- Barrow Harrold M. “Man and movement” Principle of Physical Education. Ice and Febiger 1993.

Semester - IV Evaluation Structure

Part – I Theory Section

Paper Code	Title of the Paper	Internal	External
PEC 4001	Sports Management	30	70
PEC 4002	Physical Education and Sports Psychology	30	70
PEC 4003	Health and Fitness Management	30	70
Elective/ Multidisciplinary (any one)		30	70
PEM 4004	Sports Tourism		
PEM 4005	Dissertation (Internal 20 Dissertation Evaluation + 10 Viva) and (External 50 Dissertation evaluation + 20 Viva Voce)		
PEM 4006	Life saving skill & disaster management		
		90	310
	Theoretical Internal/ External Total marks	400	

Part – II Practical Section

Event			
PEP 4007	Coaching Lesson (Internal - 6) Athletics – 3, Games – 3, Total – 6 Coaching Lesson (External – 2) Athletics – 1, Games – 1, Total – 2	60	140
PEP 4008	Specialization games (Choose any one) Skill, Technique, Tactics, officiating, performance and Viva	15	35
	Practical Internal/ External Total marks	250	

Semester – IV

PEC: 4001: Sports Management

- Unit –I :** Meaning of management , functions of management (planning organizing controlling leading evaluation) – skills of management (technical skills human skills conceptual skills) role of manager (interpersonal roles , informational roles decision roles).
- Unit –II** Attributers of organization – Classifying organizational set up of clubs; sport association, sports Authority of India department of sports and Youth affairs (center & state-school and University Department of sports and Association of Indian Universities- Supervision qualities of supervisor y techniques
- Unit –III :** Planning : steps in the planning process strategic planning – planning sports facilities (out door and indoor) – program planning ; (normal and special population)- social and economic Parameters in planning.
- Unit –IV:** Office management; personnel management, human resource management, financial Management – Event management - Man power requirement planning organization, Development recruitment and placement – monitoring performance of physical education Personnel; behavioral audit; human relations – communication in personal management public Relations
- Unit-V:** Organization of sports events (Intramurals and extramural) – Writing of circulars , notifications And invitations – publicity fund raising selecting and fixing of officials- monitoring and write-Up – press, sponsoring teams, writing reports and maintaining records – factors in sports
Marketing – sponsorships

REFERENCES

- Chelladurai .p. Managing organizations for sports physical activity, Holcomb Hathaway publishers: Arizona, 2001.
- Davis Kathleen A.,sports management WCB brown & Benchmark Iowa ,1994
- Philip kotler Marketing Management Pearson Education inc, 2003
- Lisa Pike Masteralexis Carol A Barr and Mary A. Hums Principles and Practice of Sports management, jone and Bartlett Publishers, 2005
- David C.Watt sports management and administration Routledge Taylor & Francis Group, .2003-

Semester – IV

PEC: 4002: Physical Education and Sports Psychology

- Unit – I Meaning of Physical Education and Sports Psychology, Definition, and Importance.
- Unit – II (A) Learning Process, Meaning, Definition, Principles and Implementation.
(B) Meaning of Transfer of Learning, Types of Definition, Principles and Implementation.
- Unit- III (A) Meaning of Growth and Development. Definition, Principles, Factor Effecting, Growth and Development, Age and Gender Related Symptoms of Adolescence and Traits.
(B) Meaning of Individual Difference. Definition, Types and Causes.
(C) Sports Activity According to Body Types, Effects of Individual differences in skill learning and sports performance.
- Unit – IV (A) Meaning of Emotions, Definition, Types and Symptoms.
 - Psychological Factor Affected to sports Achievement (Ex. Load, Anxiety, Stress, Aggression.)
(B). Meaning of Motivation. Definition, Types. Motivational dynamics and Method in Sports.
- Unit – V (A) Meaning of Personality, Definition. Principles, Personality Dimension, Personality and Performance, Personality Development to Physical and Sports Activity.
(B) Psychological Preparation of Competition, Definition, Principles, Aim. Influence Factor of Psychological Preparation, Short-form Psychological Preparation. Long-term Psychological Preparation.

Ref. books

- Ajemersinh r others, "Physical Education and Olympic movements" Ludhiana, Kalyani Publishers, 2004.
- Singher Richard M., "Psychology In Sports Methods and Application", Delhi, Surgite Publication, 1962.
- Singher Roberte, "Motor Burning and human performance", New-york, Mecmilen Publication company, 1975.
- Kamlesh M. L. "Psychology In Physical Education and Sports" New Delhi, Metropolitan Book Company. 1998.
- Kaever R. C. "Shiksha Avem Krida manovignana Daetoli, Nagpur, Amit Brothers Publication, 2002.
- Tripathi Premchandre, Misera Suryeprosad, "Sharike Shiksha. Avem Krida Manovignan", Bhopal, Hindi Granth Akademi, 1996.
- Kamlesh Maden, "Vyayam Avem Krida Manavignan" New Delhi, Metropolitan Bo9ok Company, 1998.
- Patel Atemaram Solanki Devendresinh, "Ramet Manovignan", Ahmadabad, Bharat Institute, 1997.
- Ravindra Anedhariya ane Aneye. "Sheksenik and Ramet Manavignan", Gandhinagar, Gujarat Rajeye Pateye Pustek Mandal, 2002.
- Pandav P. D. "Shiksha Manaevgignan" Agra Vinod Pustak Mandir, 1979.
- Patel, Chardekunt P. "Samanye Manuevignan" Ahmadabad university Grants Nirman Board Gujarat Raseye, 1991.

Semester - IV

PEC: 4003: Heath and Fitness Management

- Unit – I: **Introduction**
Concepts of Fitness and Wellness and Important of Present Time.
- Scope for Fitness Trainer, Health and Fitness Components,
 - Health screening-Health conditions that affect physical activity and medication
 - Preference to the Trainee. Expectation and Lifestyle Information.
 - General Principles of Training.
- Unit - II **Exercise for fitness & designing of the programme**
- Making the Right Exercise Programming Attentive Matters
 - understanding suitability and forms of exercise for fitness. Aerobic dance, weight Training. Other parts.
 - Fitness Training Programs Passive and Active People
 - Fitness Training Programs for Different Age Group.
 - Weight Control/Lose Training Program
 - Fitness Program me and Rehabilitation Program obesity and Diabetic People.
- Unit - III **Nutrition and Energy**
Nutrition, Calorie Consumption, weight variation due to dietary habit
- Physiological and metabolic changes During Exercise
 - The energy support (Aerobic-Anaerobic)
- Unit- IV **Relation of Exercise**
- with heart rate, equation for calculating heart rate zones for various exercise intensities
 - recommended nutritional intakes
 - dietary guidelines
 - nutrient needs for people with different life style
- Unit - V **Establishment and management of fitness centre**
- Selecting of Training Federation to Trainer.
 - Health Club/Line of Fitness Center (Lay-out)
 - Responsibility, Facilities, Equipment, supervision, safety, exercise recommendation and testing.

Ref. books

- Aemeli R. Roster. Catlen Hati Gur, "Fitness Fun", Human Kinetics' Publication.
Rebeka And Bil Tulin. "Travel Fitness weight"
Thomas R. Bechele and Roger W.L. "Fitness weight Training"
Sara Black, "The Supple Body" Dun ken Bayard Publication. 1995.
Upple A.G. "Physical Fitness" Friends Publication . 1992.

Semester - IV

PEM.4004: Sports Tourism (Elective / Multidisciplinary)

- Unit –I: History of Sport Tourism,**
Concepts of Sport Tourism Industry Historical Development of Connection between Sport and Tourism – Basic Concepts.
- Unit –II: Categories of Sport Tourism**
Classification – Scheme for Sport Tourism –Infrastructure of Sports, Tourism – The Characteristics of Participants.
- Unit –III Tourism in Development of Sports**
Development of Sport Activity Based on Available tourism resources Tourism generated Sports development Through Programs and Instruction – Development of regional Sports.
- Unit –IV: Socio – Economic**
Importance of Sports & Tourism Industry – Positive & Negative Impacts – Sports & Tourism as Economic Activities – Sports Tourism: The Issue of Socio Economic Equity – Sports Tourism to raise Sponsorship for People with disabilities and to fight diseases
- Unit –V: Modern Development and Promotional**
Characteristics In Sports Tourism – Major Events Attraction for Visitors – Tourist – Sport Tourism In the 21st century: Sport Tourism Today –Facilities / Amenities for Sports & Tourism

Ref. books

Jay Standeyone Bye Sports Tourism

Pol di Kanape Bay Sports Tourism.

Semester - IV

PEM: 4005: Dissertation (Elective)

- Research Project/ Dissertation related to Physical Education and Sports
- Survey/historical/comparative /Experimental
- Applied research report on Allied sports sciences, physical fitness, Training methods, Exercise physiology, Sports Sociology, Sports psychology games and sports etc.

Semester-IV
PEM: 4006:

LIFE SAVING SKILL & DISASTER MANAGEMENT
(Elective/ Multidisciplinary)

UNIT – I LIFE SAVING SKILL

- Meaning and concept of life saving skill
- Need and importance of life saving skill

UNIT – II DISASTER MANAGEMENT

- Meaning and concept of disaster management
- Need and importance of disaster management

UNIT – II CLASSIFICATION OF DISASTER MANAGEMENT

Natural Disaster

- Earth quack, Flood, Drought, Cyclone, Tsunami, Landslide
- Avalanche, Heat wave, Cold wave, Fire ,Coastal and sea erosion, Biological disaster endemic epidemic disaster

Men made disaster

- War, Terrorist attack
- Radio active hazard

UNIT – IV SAFETY MEASURE & FIRST-AID

Meaning and concept of safety measure & first – aid
Prevention of disasters

UNIT – V DISASTER MANAGEMENT

- Steps of disaster management
- Various act and agencies in disaster management
 - Disaster and management act
 - Local emergency management agency
 - Role of voluntary/NGO agency
 - National disaster management agency
 - Do's and don't and during disaster